## Clean Version of Claims

1. A system for processing price data corresponding to a sequence of time for a selected interval, said system comprising:

a database means for storing said price data in system addressable format, wherein said price data is organized for processing into a non-linear relationship;

a data processor responsive to price data stored in said database and capable of generating said non-linear relationship having a smooth, curvalinear characteristic for a range of data within said interval;

a pattern recognition processor for applying said smoothed non-linear relationship to discern the existence of one or more patterns of price-time data; and

generating a results output based on a recognition of said pattern, if any.

2. The system of claim 1 wherein real-time price data is inputted from commercial financial data vendors.

3. The system of claim 1 wherein said database means includes means for storing price data taken from end of day trading records.

4. The system of claim 1 wherein said database means includes means for storing trading volume and trade size data.

5. The system of claim 1 further comprising means for testing prediction characteristics, via convergence criteria and adjusting system parameters in response to said criteria.

6. The system of claim 1 further comprising programming to detect broadening tops and broadening bottoms.

7. The system of claim 1 further comprising programming to detect head and shoulders pattern.

8. The system of claim 1 further comprising programming to detect triangle tops and triangle bottoms.

9. The system of claim 1 further comprising programming to detect rectangle tops and rectangle bottoms.

10. The system of claim 1 further comprising programming to detect double tops and double bottoms.

11. A data processing method for developing predictions on future price movements based on historical price data said method comprising the steps of:

a) storing data relating to price at select time intervals;

b) develop a non-linear relationship over discrete time intervals and establishing smooth, curvalinear characteristics for said price data at select intervals;

c) apply pattern recognition techniques to said curvalinear characteristics to detect one or more patterns for said select intervals; and

d) generate a results output based on a recognition of one or more patterns.

12. The method of claim 11 wherein recognized patterns are selected from the group comprising:: head and shoulders, broadening tops and bottoms, triangle tops and bottoms, rectangle tops and bottoms, and double tops and bottoms.

13. The method of claim 1 wherein a kernel regression is used in developing a non-linear relationship and establishing a smooth curvalinear characteristic.

14. The method of claim 1 wherein said relationship is controlled by select parameters that are adjustable based on convergence criteria.